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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,923	08/04/2003	Takashi Nozu	040447-0251	4950
22428 7590 12/04/2007 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
			EXAMINER CHEN, WENPENG	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 12/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/632,923

Applicant(s)

NOZU, TAKASHI

Examiner

Wenpeng Chen

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/21/07 has been entered.

**Examiner's responses to Applicant's remark**

2. Applicant's arguments filed 9/21/07 have been fully considered but they are not persuasive. The Examiner has thoroughly reviewed Applicants' arguments with regard to the amended claims in view of the teachings of Matsubara and JPEG2000 CIFF and firmly believes that the cited reference to reasonably and properly meet the limitations of the claims.

a. Arguments of Applicant(s) -- Matsubara does not teaches the feature of "extracting parameter calculating means for calculating extracting parameters based on the coding parameters and the expanding parameters". Matsubara does not disclose three separate parameters utilized in image expansion, or the relationships between the three parameters. Further, Matsubara does not disclose the features of these three parameters as recited in claim 1. The Office' Action asserts that both the coding parameters and the extracting parameters are level numbers. However, it is clear both from the specification of the invention, and the independent

claims, that the coding parameters and extracting parameters include separate and distinct parameters. Further, the independent claims require that the extracting parameters are calculated "based on the coding parameters and the expanding parameters." However, there is no teaching or suggestion in Matsubara, if level numbers were incorrectly interpreted to be the extracting parameters, that the level numbers are calculated based upon more than one parameter.

Examiner's response -- Although "level numbers" are read for both the coding parameters and the extracting parameters, the level numbers interpreted for the two types of parameters are separate and distinct parameters. The Examiner provides the following explanation to make his point clearer.

(1) At first, Matsubara determines (detects) the level numbers of all the available level (all the available level being coding parameters) from an image code as taught, for example in paragraphs 0066 and 0101.

(2) Matsubara then designates a determined image size (the determined image size being expanding parameter) as taught, for example, in paragraphs 0066, 0101.

(3) Matsubara finally calculates the desired level number  $i$  (the desired level number being an extracting parameter) based on all the level numbers (the coding parameters) and the determined size (the expanding parameters) according to equation (1) in paragraphs 0066.

It is now clear that all the level numbers are the coding parameters and the specific desired level number decided with equation 1 is the extracting parameter -- showing that they are distinct parameters.

Matsubara teaches about apparatus and method for an image, in which an image itself can be considered as a layout object or including a layout object. However, Matsubar does not teach

explicitly a plurality of layout objects in the image. JPEG2000 CIFF teaches images codes including a plurality of layout objects. Each layout object of said plurality of layout objects has coded data in JPEG2000 format as indicated in JPEG2000 signature box, including a plurality of tiles. Therefore, JPEG2000 CIFF teaches image code which comprises coding parameters including a number of layout objects of the plurality of layout objects that are in a particular page. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to expand each layout object of JPEG2000 CIFF with Matsubara's approach when an image of a JPEG2000 CIFF file is to be expanded.

In the combination, because pluralities of layout objects are treated, there is plurality of values associated with each of the above-mentioned parameters.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara (US patent application 20020057843) in view of JPEG2000 Image coding system: Compound Image File Format cited in IDS (Hereafter referred as JPEG2000 CIFF).

Matsubara teaches an image expanding apparatus, comprising:

-- for Claim 1, coding parameter detecting means for detecting coding parameters from an image code; (paragraphs 0066, 0101; The level numbers are the coding parameters. When the "i" level data to be extracted, all the level numbers shall be detected to see whether it is an "i" level.)

-- for Claim 1, expanding parameter designating means for designating expanding parameters; (paragraphs 0066, 0101; The determined image size is used to designate levels "i" and "i+1".)

-- for Claim 1, extracting parameter calculating means for calculating an extracting parameter based on the coding parameters and the expanding parameters; (paragraphs 0066, 0101; The level numbers related to the determined image size are calculated.)

-- for Claim 1, code extracting means for extracting a code necessary for obtaining the expanded image designated by the expanding parameters from the image code with reference to the extracting parameters; (paragraphs 0068, 0101, 0102; Wavelet coefficients associated with the extracted level numbers are extracted and decoded (expanded).)

-- for Claim 2, image expanding means for obtaining an expanded image designated by the expanding parameters based on the extracted code; (paragraphs 0068, 0101, 0102; Wavelet coefficients associated with the extracted level numbers are extracted and decoded (expanded).)

-- for Claim 3, wherein the code extracting means is configured to extract as the extracted code a code having a necessary resolution level of a necessary tile of a necessary layout object. (paragraph 0074; In JPEG2000, an image that can be considered as layout object, is divided into tiles. Each tile is then wavelet decomposed and coded. Therefore, Matsubara also teaches this feature.)

*For the newly added Claims 16-18, Matsubara further teaches:*

*-- wherein the code necessary for obtaining the expanded image is related to a resolution level obtained by the extracting parameter calculating means. (Figs. 8-9; paragraphs 0066, 0074, 101-102; Paragraph 0074 referred to JPEG2000. Please see JPEG2000 section 8.2, page*

*11, section, 1.7.3.6, page 154-156. In paragraph 101, the wavelet coefficients (the code) for expanding are related to the resolution level.)*

Because Matsubara teaches a system (Figs. 7-8) and computer program product embedded in a computer-readable medium (paragraph 0094) for implementing the above methods, Matsubara also teaches Claims 6-8 and 11-13.

However, Matsubar does not teach features related to (1) a plurality of layout objects recited in Claims 1, 6, and 11, (2) the details recited in Claim 4 and (3) "compound document file format" in Claims 4-5, 9-10, and 14-15.

JPEG2000 CIFF teaches images codes including:

-- for Claims 1, 6, and 11, image code including a plurality of layout objects, each layout object of said plurality of layout objects including a plurality of tiles, wherein the image code also comprises coding parameters including a number of layout objects of the plurality of layout objects that are in a particular page; (Fig. A-1 including the JPEG 2000 signature box teaches all the above-listed parameters. The Examiner does not rely on JPEG2000 CIFF to teach the coding parameter detecting means. The Examiner bases on JPEG2000 CIFF to teach details of image code. *The teaching of JPEG 2000 signature box is given in the JPEG200 N1646R listed in IDS.*)

-- for Claims 1, 6, and 11, wherein the image code also comprises expanding parameters including a number of particular layout objects to be displayed in an expanded image; (Fig. A-1 including the JPEG 2000 signature box teaches all the above-listed parameters)

-- for Claims 1, 6, and 11, wherein the image code also comprises parameters including (i) one or more certain layout objects of the plurality of layout objects that are necessary for providing the expanded image and (ii) for each layout object of the one or more certain layout

objects, one or more particular tiles of the plurality of tiles of the layout object that are to be used to provide the expanded image. (Fig. A-1 including the JPEG 2000 signature box teaches all the above-listed parameters)

It is desirable to have flexibility to decode compound images based on various conditions. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include JPEG2000 Compound Image File Format in Matsubara's coding/decoding system so Matsubara extracts coded data based on JPEG2000 Compound Image File Format because the combination improves decoding flexibility of compound images. The combination thus teaches:

- coding parameter detecting means for detecting coding parameters from an image code, said image code including a plurality of layout objects, each layout object of said plurality of layout objects including a plurality of tiles, said coding parameters including a number of layout objects of the plurality of layout objects that are in a particular page;

- expanding parameter designating means for designating expanding parameters~ said expanding parameters including a number of particular layout objects to be displayed in an expanded image;

- extracting parameter calculating means for calculating-an extracting parameters based on the coding parameters and the expanding parameters, said extracting parameters including (i) one or more certain layout objects of the plurality of layout objects that are necessary\_ for providing the expanded image and (ii) for each layout object of the one or more certain layout objects, one or more particular tiles of the plurality of tiles of the layout object that are to be used to provide the expanded image.

JPEG2000 CIFF also teaches:



-- for Claim 4, wherein the coding parameters further include vertical and horizontal sizes in pixels of a page image and a size of a tile, wherein the expanding parameters further include an expanded image size proportional to a resolution of the expanded image and an image display area for each layout object; (Fig. A-1 including the JPEG 2000 signature box teaches all the above-listed parameters)

-- for Claim 5, JPEG2000 Image coding system with Compound Image File Format.

(Title)

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

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Art Unit: 2624

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Wenpeng Chen  
Primary Examiner  
Art Unit 2624

December 3, 2007

A handwritten signature in black ink, appearing to read 'Wenpeng Chen', written in a cursive style.